

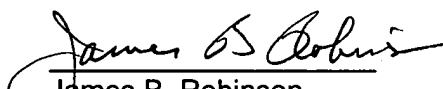
S/N 09/702,093  
Docket no. 15260  
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**REMARKS**

The Examiner has allowed claims 1 – 9, 11 and 12. The Examiner has also rejected claims 10 and 13, which Applicants hereby have canceled. Claims 11 and 12 are amended to include all the limitations of claim 10 from which they depended.

Should the Examiner have any issues she would like to discuss in order to facilitate the progression of this application, she is encouraged to call the undersigned at (770)-587-7273.

Respectfully submitted,

  
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1. (previously presented) An aqueous coating formulation containing solids, for enhancing image visualization and retention of reactive dye-based inks, consisting essentially of:
  - a) a cationic homopolymer or copolymer,
  - b) a cationic or non-ionic fabric softener; and
  - c) urea, and
  - d) an ingredient selected from the group consisting of sodium bicarbonate, sodium carbonate and combinations thereof.
2. (previously presented) The aqueous coating formulation of claim 1 wherein said cationic homopolymer or copolymer is present in an amount between about 5 and about 95 weight percent of the total solids.
3. (previously presented) The aqueous coating formulation of claim 1 wherein said fabric softener is present in an amount between about 5 and about 20 weight percent of the total solids.
4. (previously presented) The aqueous coating formulation of claim 1 further consisting essentially of a latex binder.
5. (previously presented) The aqueous coating formulation of claim 4 wherein said latex binder is present in an amount between about 0 and about 80 weight percent of the total solids.
6. (previously presented) The aqueous coating formulation of claim 1 wherein said ingredient is present in an amount between about 3 and 10 weight percent of the total solids.
7. (previously presented) The aqueous coating formulation of claim 1 wherein the urea is present in an amount between about 5 and 12 weight percent of the total solids.
8. (previously presented) The aqueous coating formulation of claim 1 further comprising an additive selected from the group consisting of wetting agents, defoamers, surfactants and combinations thereof.

9. (previously presented) The aqueous coating formulation of claim 8 wherein said additive is present in an amount between about 0.1 and 1 weight percent of the total solids.
10. (canceled) An aqueous imbibing solution, for enhancing image visualization and retention of reactive dye-based inks consisting essentially of:
  - a) an ingredient selected from the group consisting of sodium bicarbonate, sodium carbonate, and combination thereof, and,
  - b) urea.
11. (currently amended) ~~The aqueous imbibing solution of claim 10 wherein said ingredient~~ An aqueous imbibing solution, for enhancing image visualization and retention of reactive dye-based inks consisting essentially of:
  - a) an ingredient selected from the group consisting of sodium bicarbonate, sodium carbonate, and combination thereof, which is present in an amount between about 30 and 40 weight percent of the total solids and,
  - b) urea.
12. (currently amended) ~~The aqueous imbibing solution of claim 10 wherein said urea is present~~ An aqueous imbibing solution, for enhancing image visualization and retention of reactive dye-based inks consisting essentially of:
  - a) an ingredient selected from the group consisting of sodium bicarbonate, sodium carbonate, and combination thereof, and,
  - b) urea in an amount between about 50 and 70 weight percent of the total solids.
13. (canceled) The aqueous imbibing solution of claim 10 further consisting essentially of an additive selected from the group consisting of wetting agents, defoamers, surfactants and combinations thereof.
14. (withdrawn) An aqueous coating formulation containing solids, for enhancing image visualization and retention of acid dye-based inks, comprising:

- a) a cationic polymer or copolymer,
- b) a fabric softener,
- c) urea, and
- d) ammonium sulfate.

- 15. (withdrawn) The aqueous coating formulation of claim 14 wherein said cationic polymer or copolymer is present in an amount between about 5 to 95 % of the total solids.
- 16. (withdrawn) The aqueous coating formulation of claim 14 wherein said fabric softener is present in an amount between about 5 to 20 % of the total solids.
- 17. (withdrawn) The aqueous coating formulation of claim 14 further comprising a latex binder.
- 18. (withdrawn) The aqueous coating formulation of claim 17 wherein said latex binder is present in an amount between about 0 to 80 % of the total solids.
- 19. (withdrawn) The aqueous coating formulation of claim 14 wherein the urea is present in an amount between about 2 and 5% of the total solids.
- 20. (withdrawn) The aqueous coating formulation of claim 14 wherein the ammonium sulfate is present in an amount between about 5 and 10 % of the total solids.
- 21. (withdrawn) The aqueous coating formulation of claim 14 further including additives selected from the group including wetting agents, defoamers, and surfactants.
- 22. (withdrawn) The aqueous coating formulation of claim 21 wherein said additives are present in an amount between about 0.1 and 1 % of the total solids.
- 23. (withdrawn) An aqueous imbibing solution, for enhancing image visualization and retention of acid dye-based inks comprising:
  - a) ammonium sulfate,

b) urea.

24. (withdrawn) The aqueous imbibing solution of claim 23 wherein said ammonium sulfate is present between about 30 and 40% of the total solids.
25. (withdrawn) The aqueous imbibing solution of claim 23 wherein said urea is present in an amount of between about 50 and 70 % of the total solids.
26. (withdrawn) The aqueous imbibing solution of claim 23 further including additives selected from the group including wetting agents, defoamers, and surfactants.
27. (withdrawn) A method of treating a substrate so as to improve the adhesion, colorfastness and washfastness of a reactive dye-based ink jet ink printed onto the substrate, which will be exposed to a post-treatment step following printing, the method comprising the steps of:
- a) providing a substrate,
  - b) treating the substrate with an aqueous coating formulation comprising a cationic polymer or copolymer, a fabric softener, urea, and an ingredient selected from sodium bicarbonate, sodium carbonate or combinations thereof.
28. (withdrawn) The method of claim 27 wherein said cationic polymer or copolymer is present in said aqueous coating formulation in an amount between about 5 to 95 % of the total solids.
29. (withdrawn) The method of claim 27 wherein said fabric softener is present in said aqueous coating formulation in an amount between about 5 to 20 % of the total solids.
30. (withdrawn) The method of claim 27 wherein said aqueous coating formulation further includes a latex binder.
31. (withdrawn) The method of claim 30 wherein said latex binder is present in said aqueous coating formulation in an amount between about 0 to 80 % of the total solids.

32. (withdrawn) The method of claim 27 wherein said urea is present in said aqueous coating formulation in an amount between about 5 to 12 % of the total solids.
33. (withdrawn) The method of claim 27 wherein said sodium bicarbonate, sodium carbonate or combinations thereof is present in said aqueous coating formulation in an amount between about 3 to 10 % of the total solids.
34. (withdrawn) An article produced by the method of claim 27.
35. (withdrawn) A method of producing a printed substrate so as to improve the adhesion, colorfastness and washfastness of a reactive dye-based ink jet ink printed onto the substrate, the method comprising the steps of:
- a) providing a substrate,
  - b) treating the substrate with an aqueous coating formulation comprising a cationic polymer or copolymer, a fabric softener, urea, and an ingredient selected from sodium bicarbonate, sodium carbonate or combinations thereof,
  - c) drying the substrate,
  - d) printing on the substrate with a reactive dye-based ink,
  - e) post-treating the printed substrate of step d).
36. (withdrawn) A method of treating a substrate so as to improve the adhesion, colorfastness and washfastness of a reactive dye-based ink jet ink printed onto the substrate, which will be exposed to a post-treatment step following printing, the method comprising the steps of:
- a) providing a substrate,
  - b) treating the substrate with an aqueous coating formulation comprising a cationic polymer or copolymer, and a fabric softener,
  - c) treating the substrate of step b) with an aqueous imbibing solution of urea, and an ingredient selected from sodium bicarbonate, sodium carbonate or combinations thereof.
37. (withdrawn) An article produced by the method of claim 36.

38. (withdrawn) A method of producing a printed substrate so as to improve the adhesion, colorfastness and washfastness of a reactive dye-based ink jet ink printed onto the substrate, the method comprising the steps of:
- a) providing a substrate,
  - b) treating the substrate with an aqueous coating formulation comprising a cationic polymer or copolymer, a fabric softener,
  - c) treating the substrate of step b) with an imbibing aqueous solution of urea, and an ingredient selected from sodium bicarbonate, sodium carbonate or combinations thereof,
  - d) drying the substrate,
  - e) printing on the substrate with a reactive dye-based ink, and
  - f) post treating the printed substrate of step e).
39. (withdrawn) A printed substrate produced in accordance with the method of claim 35.
40. (withdrawn) A printed substrate produced in accordance with the method of claim 38.
41. (withdrawn) A method of treating a substrate so as to improve the adhesion, colorfastness and washfastness of an acid dye-based ink jet ink printed onto the substrate, and which substrate will be exposed to a post-treatment step following printing, the method comprising the steps of:
- a) providing a substrate,
  - b) treating the substrate with an aqueous coating formulation comprising a cationic polymer or copolymer, a fabric softener, urea, and ammonium sulfate.
42. (withdrawn) The method of claim 41 wherein said cationic polymer or copolymer is present in an amount between about 5 to 95 % of the total solids.
43. (withdrawn) The method of claim 41 wherein said fabric softener is present in an amount between about 5 to 20 % of the total solids.

44. (withdrawn) The method of claim 41 wherein the aqueous coating formulation further comprises a latex binder.
45. (withdrawn) The method of claim 44 wherein said latex binder is present in an amount between about 0 to 80 % of the total solids.
46. (withdrawn) The method of claim 41 wherein the urea is present in an amount between about 2 and 5 % of the total solids.
47. (withdrawn) The method of claim 41 wherein the ammonium sulfate is present in an amount between about 5 and 10 % of the total solids.
48. (withdrawn) An article produced by the method of claim 41.
49. (withdrawn) A method of treating a substrate so as to improve the adhesion, colorfastness and washfastness of an acid dye-based ink jet ink printed onto the substrate, which will be exposed to a post-treatment step following printing, the method comprising the steps of:
- a) providing a substrate,
  - b) treating the substrate with an aqueous coating formulation comprising a cationic polymer or copolymer, and a fabric softener,
  - c) treating the substrate of step b) with an aqueous imbibing solution of urea, and ammonium sulfate.
50. (withdrawn) A method of producing a printed substrate so as to improve the adhesion, colorfastness and washfastness of an acid dye-based ink jet ink printed onto the substrate, the method comprising the steps of:
- a) providing a substrate,
  - b) treating the substrate with an aqueous coating formulation comprising a cationic polymer or copolymer, a fabric softener, urea, and ammonium sulfate,
  - c) drying the substrate,
  - d) printing on the substrate with a reactive dye-based ink,



- e) post-treating the printed substrate of step d).

51. (withdrawn) A printed substrate produced in accordance with the method of claim 50.

52. (withdrawn) A method of producing a printed substrate so as to improve the adhesion, colorfastness and washfastness of an acid dye-based ink jet ink printed onto the substrate, the method comprising the steps of:

- a) providing a substrate,
- b) treating the substrate with an aqueous coating formulation comprising a cationic polymer or copolymer, a fabric softener,
- c) treating the substrate of step b) with an imbibing aqueous solution of urea, and an ingredient selected from sodium bicarbonate, sodium carbonate or combinations thereof,
- d) drying the substrate,
- e) printing on the substrate with a reactive dye-based ink, and
- f) post treating the printed substrate of step e).

53. (withdrawn) A printed substrate produced in accordance with the method of claim 52.